

normal. Fluctuations are thus repressed as soon as they appear, and it is not easy to comprehend how they could be the foundation for settled changes.

The Mendelian school of biologists in their faith to "sports" or mutations. The researches of Mendel showed that these may represent new innate impulses which interbreeding may conceal but cannot obliterate. Hybrids between the "sport" and a normal individual may not *display* the new character. But a proportion of the reproductive cells which they produce will contain it. and if two of the hybrids interbreed (as may happen in the course of a few generations) some of their offspring will possess the new character purely, will display it in their form or colour, and, if they interbreed, will produce offspring in which the new character is fixed. Here, then, is a process by which a new variety of importance may be established, and by which it is established by breeders and nurserymen. Instances of persistent, or Mendelian, characters are tallness and dwarfness of habit in plants, the colours of certain flowers, the forms and markings of different breeds of rabbits, fowls and pigeons, the colour of the eyes in mankind. All characters do not, however, appear to be of this class. We know from experience that there are numerous, and very important, peculiarities that do not resist cross-breeding: the characters of

both parents
are *blended* in the hybrid offspring of
finches and
canaries. of dogs and jackals, and of
white and
coloured races of mankind. But
Mendelist ex-
perimenters have proved a fact
which is of
immense importance—that the
reproductive cells
which are produced in large numbers
by male and
female may differ among themselves,
that they
may possess different shares of
ancestral *character*